



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,960	05/04/2005	Wen Zhao	PAT 799W-2	8081

26123	7590	01/07/2008
BORDEN LADNER GERVAIS LLP		
Anne Kinsman		
WORLD EXCHANGE PLAZA		
100 QUEEN STREET SUITE 1100		
OTTAWA, ON K1P 1J9		
CANADA		

EXAMINER
LY, NGHI H

ART UNIT	PAPER NUMBER
2617	

NOTIFICATION DATE	DELIVERY MODE
01/07/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ipinfo@blgcanada.com
aarmstrongbaker@blgcanada.com
akinsman@blgcanada.com

Office Action Summary

Application No.

10/533,960

Applicant(s)

ZHAO ET AL.

Examiner

Nghy H. Ly

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-10 and 12-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-10 and 12-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2617

4. Claims 2-6, 9, 10, 12-16, 18 and 21-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunzinger et al (US 6,501,947) in view of Virtanen (US 6,249,681).

Regarding claims 12 and 21, Hunzinger teaches a method of automatically re-establishing a data connection on a wireless data network (see column 4, lines 37-40 and see Abstract), comprising: determining, at minimum fixed time intervals determined by a service check timer, the status of a previously established data connection (see column 2, lines 22-29, see *"timer"* and *"after a failed connection"*, also see column 4, lines 8-16, see *"an initial attempt to connect has failed"* or column 4, lines 17-21, see *"the mobile station 106 was unable to communicate with the base station"* or see *"if the connection with the base station 104 is unsuccessful"*), automatically transmitting a connection request if the previously established data connection is determined to be lost (see column 2, lines 22-29, see *"timer"* and *"after a failed connection"*, also see column 4, lines 8-16, see *"an initial attempt to connect has failed"* or column 4, lines 17-21, see *"the mobile station 106 was unable to communicate with the base station"* or see *"if the connection with the base station 104 is unsuccessful"*), and re-establishing the data connection if the transmitted connection request is accepted by the wireless data network (see column 2, lines 42-55).

Hunzinger does not specifically disclose re-establishing the previous established data connection if the transmitted connection request is accepted by the wireless data network.

Art Unit: 2617

Virtanen teaches re-establishing the previous established data connection if the transmitted connection request is accepted by the wireless data network (see Abstract, column 1, line 59 to column 2, line 4, column 5, lines 1-15 and column 12, lines 24-58).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Virtanen into the system of Hunzinger in order to provide an improved method and apparatus for re-establishing an interrupted data packet call in a telecommunication system (Virtanen, column 1, lines 39-42).

Regarding claims 2 and 22, Hunzinger further teaches the wireless data network is a CDMA2000 network (see Abstract).

Regarding claim 3, the combination of Hunzinger and Virtanen further teaches determining that the previously established data connection is established includes receiving a refusal of service message from the wireless data network (Virtanen, see Abstract, column 1, line 59 to column 2, line 4, column 5, lines 1-15 and column 12, lines 24-58).

Regarding claim 4, Hunzinger further teaches the refusal of service message is one of Retry Order, Reorder Order and a Release Order (see column 2, lines 30-42).

Regarding claim 5, Hunzinger further teaches further including initializing a back off timer on receipt of the refusal of service message (see column 2, lines 30-42).

Regarding claim 6, Hunzinger further teaches the refusal of service message is an Intercept Message (see column 2, lines 30-42).

Regarding claim 9, Hunzinger further teaches initializing the back of timer is based on a retry delay specified by the Retry Order (see column 6, lines 41-56).

Regarding claim 10, Hunzinger further teaches the back off timer is initialized to a time greater than or equal to the retry delay (see column 6, lines 41-56).

Regarding claim 13, the combination of Hunzinger and Virtanen further teaches determining the status of the previously established data connection is preceded by initializing the service check timer (see Virtanen, Abstract, column 4, lines 21-43 and column 9, lines 4-34).

Regarding claim 14, Hunzinger further teaches the step of automatically transmitting the connection request is performed upon expiry of a back off timer (see column 4, lines 37-51).

Regarding claim 15, Hunzinger further teaches the back off timer is initialized to a value based on a retry delay determined in response to a refusal of service message (see column 2, lines 30-42 and column 6, lines 41-56).

Regarding claim 16, Hunzinger further teaches determining the status of the previously established data connection includes comparing assigned network resources to default values (see column 2, lines 10-21).

Regarding claim 18 and 25, Hunzinger further teaches a step of forcing premature expiry of the service check timer upon receipt of a Release Order (see column 4, lines 37-40).

Art Unit: 2617

Regarding claim 23, Hunzinger further teaches the connection manager includes means to reset the back off timer in response to the receipt of one of a Retry Order, Reorder Order and a Release Order (see column 4, lines 37-51).

Regarding claim 24, Hunzinger further teaches the connection manager includes an accumulator for tracking consecutive rejections of service, and means to reset the back off timer in accordance with the number of consecutive rejections (see column 2, lines 30-42).

Regarding claim 26, Hunzinger further teaches the means to reset the back off timer includes means to reset the back off timer such that the back off time is greater than, or equal to, a retry delay determined in response to a Retry Order or a Release Order (see column 2, lines 30-42).

Regarding claim 27, Hunzinger further teaches the connection request is automatically transmitted upon detection of a new wireless data network (see column 4, lines 37-40 and Abstract).

5. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunzinger et al (US 6,501,947) in view of Virtanen (US 6,249,681) and further in view of Marry et al (US 4,827,507).

Regarding claim 7, the combination of Hunzinger and Virtanen teaches claim 14. The combination of Hunzinger and Virtanen does not specifically disclose initializing the back off timer is based on a random seed.

Art. Unit: 2617

Mary teaches initializing the back off timer is based on a random seed (see column 12, lines 1-21).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Mary into the system of Hunzinger and Virtanen in order to protect the exchange of keys and synchronization from interruptions in the communication channel (see Mary, column 2, lines 24-26).

Regarding claim 8, Hunzinger further teaches the back off timer is initialized to a time greater than or equal to any back off timer time calculated after a last previously established data connection (see column 4, lines 37-51).

6. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hunzinger et al (US 6,501,947) in view of Virtanen (US 6,249,681) and further in view of Hunzinger (US 2002/0082032A1).

Regarding claim 20, the combination of Hunzinger (US 6,501,947) and Virtanen teaches claim 12. The combination of Hunzinger (US 6,501,947) and Virtanen does not specifically disclose the connection request is an Origination Message.

Hunzinger (US 2002/0082032A1) teaches the connection request is an Origination Message (see [0007]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Hunzinger (US 2002/0082032A1) into the system of Hunzinger et al (US 6,501,947) and Virtanen in

Art Unit: 2617

order to allow the infrastructure to adapt access parameter to increase or decrease the likelihood of successful access (see Hunzinger (US 2002/0082032A1), Abstract).

7. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hunzinger et al (US 6,501,947) in view of Virtanen (US 6,249,681).

Regarding claim 17, the combination of Hunzinger and Virtanen teaches claim 16 except that the step of comparing includes determining that no data connection is established when an assigned Internet Protocol address is set to 0.0.0.0.0. However, such Internet Protocol address is set to 0.0.0.0.0. would have been obvious since the particular Internet Protocol address could have been determined by the inventor's choice e.g., use an Internet Protocol address which can improve reconnection attempts in the communication network.

8. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hunzinger et al (US 6,501,947) in view of Virtanen (US 6,249,681) and further in view of Official notice.

Regarding claim 19, the combination of Hunzinger and Virtanen teaches claim 18 except that the Release Order is a Point-to-point-protocol termination request. However, the Examiner takes Office notice that such feature as recited in the claim is very well known in the art.

Art Unit: 2617

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Hunzinger and Virtanen for providing a method as claimed, for obtaining reconnection in communication network.

Response to Arguments

9. Applicant's arguments with respect to claims 2-10 and 12-27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (571) 272-7911. The examiner can normally be reached on 9:30am-8:00pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

Application/Control Number: 10/533,960

Page 10

Art Unit: 2617

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nghi H. Ly

A handwritten signature in black ink, appearing to be 'Nghi H. Ly', written in a cursive style.